Community News

Johnson Engineering 'plugs in' for learning

By Marilyn Tellier

Johnson Engineering, along with other NASA contractors nationwide, is participating in the most recent innovation in an already unique distant-learning program created by the Department of Space Studies at the University of North Dakota.

The newest addition to the program is a short course on telerobotics that is being presented jointly by UND's Department of Space Studies and NASA's Ames Research Center utilizing the latest technologies offered on the Internet. Students are able to attend classes taught real-time via the Internet while being afforded the considerable convenience of never having to leave their home or workplace.

Rodney Long, a Johnson Engineering design engineer, has taken advantage of this cutting-edge opportunity by enrolling in the course which is taught by Ames scientists and engineers. Long, who is with Johnson's Special Projects Group, is attempting to expand his knowledge base regarding robotics. He is presently working on the development of a robotic arm which is intended for use in JSC's Neutral Buoyancy Laboratory.

"The course is a valuable resource for instruction on robotic development, and has proven very useful towards the successful completion of work I am involved in," Long said.

Long attends the weekly, Internet-accessible classes via a computer in JSC's Flight Crew Support Division's Design Engineering Integration room in Bldg. 9. Once a week, after business hours, the room is reserved for JSC and contractor employees who are enrolled in the nine-week course. Johnson is covering Long's tuition fee for the course through its Employee Education Assistance Program, which is offered to employees who take job-related continuing education courses.

The University of North Dakota master's degree program in space studies, created in 1987, is the only one of its kind in the U.S and is aimed at those who are seeking to enter the space studies field as well as aerospace professionals who may wish to expand on their existing knowledge. In January of 1996, the decision was made to go on-line with the program. In the 16 months that the distant-learning program has been made available there has been increasing interest raised, to date, students from more than 30 states and seven countries have enrolled in the program.

"Most enrolled students are married, well-established in space-related occupations, and seeking to advance themselves in their chosen careers," said Dr. Charles Wood, chairman of the program. "For these students, moving to North Dakota for the two years necessary to attain their masters degree in space studies is just not feasible or convenient. Enter remote-learning to the rescue. Now it doesn't matter where you live or work, you can still attain a degree. And for those students who prefer to be educated in a more traditional manner (and are willing to brave the North Dakota winters), they are more than welcome to physically attend the university."

Wood, and his colleague, Dr. Steven Williams, assistant professor of space studies, share in promoting, facilitating and conducting the program. Both of these scientist/educators teach, advise students, conduct research and otherwise support their department and university.

On a recent trip to Houston to attend the 28th annual Lunar and Planetary Science Conference, hosted by the Lunar and Planetary Institute in conjunction with JSC, Wood and Williams met with Johnson Engineering President Tom Short to discuss the university's space studies degree program in greater detail. Wood described the program as a way of combining scientific, technical, medical, political and legal aspects of exploration and development of space into one all-encompassing degree program.

"Students in the program can focus on such areas as planetary science, global change, space law and commercialization," Wood said. "Most students enrolled in the masters program are not engineers or going into engineering. Rather, they are employed in other fields of science, or other disciplines such as business or communications."

Interactive sessions are offered in a way that accommodates students worldwide. U.S. students are offered courses in the evening, the most convenient time for students who work full time. Noon courses are conducted at the university and are translated into evening classes for European students and into morning classes for Asian students.

In the future, more one-credit seminar courses similar to the one in telerobotics may be offered. Image processing is one such course under consideration. The university also is looking at incorporating technical improvements such as live video and audio and on-line simulations, some of which are being tested during this present course in telerobotics.

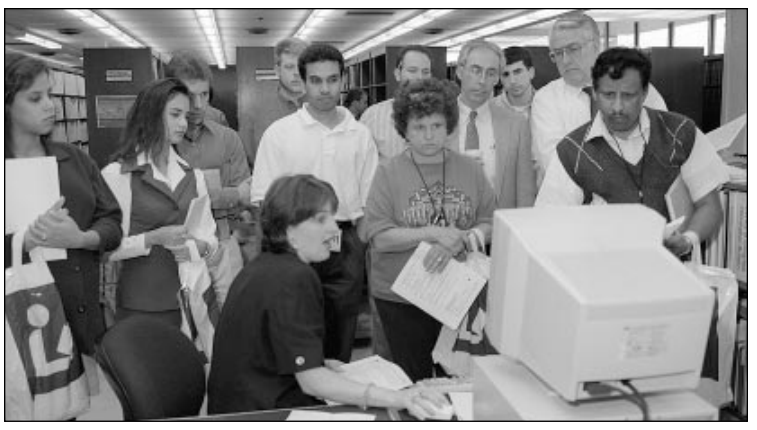
Wood said the SPACE.EDU website acts as a virtual campus for the distant-learning students, offering them access to campus facilities on an equal level to those available to students who physically attend the university.

"Students can interact with instructors, take exams, turn in assignments and acquire information from the library," Wood said. "Students have no excuse for missing classes since they are able to log-on from anywhere-even their hotel rooms while on travel."

To be admitted into the masters program, a candidate must possess a bachelor's degree in any of the following disciplines: engineering, science, business, social science, communication or information systems. For more information regarding admission requirements or the space studies program in general, visit the university's web site at http//www.space.edu/ or contact the Department of Space Studies directly at 1-800-828-4274.

Photo courtesy Johnson Engineering

Rodney Long, a Johnson Engineering design engineer, attends a telerobotics course via the Internet offered by the Department of Space Studies at the University of North Dakota.



JSC Photos S97-05604, S97-05603 by Steve Candler

OPEN HOUSE—Organizers say the Scientific and Technical Information Center Open House, held April 15, was a resounding success, with more than 600 employees attending throughout the day. The 30 plus demonstrations and tours were attended by an average of 10 people each. The center received more than 300 surveys with positive comments. Participants said they appreciated the variety in the schedules, learned from the systems demonstrations and heartily support having an open house annually. Library staff already have received requests from several organizations across site for custom training and instruction.

The following employees won their choice of a book by filling out JSC Form 1621, which registered them for borrowing privileges at the library: John Jackson, Mary Wilkerson, Melissa Perret, Larry Shaw, Rebella Mraz, Joseph Yeo, William Readdy, Silvia Stewart, Tom Conger, Bashir Syed, George Fletcher, Robert Rose, Karen Clark, Ellen Hill, Terri Schneider, Randal Sharon Killough, Jacque Myrann, Sharon Lafuse, Chin Lin, Steven King, Dell Avery, Anna Lyon and Steven Jaeger.

Samantha Nichols and Chris Monk won an autographed copy of the book "Orbit" by Astronaut Jay Apt.

Winners of the library scavenger hunt also received a autographed copy of Orbit. Winners were: first place, Karen Frank; second place, Richard Gilbert; and third place, tie between Katie Hamilton, Chris Shannon and Trinese McKenzie.

Above: Sharon Halprin shows open house visitors how to use the vast computer resources located in the library. Below: Employees "sign up" to obtain library borrowing privileges.

JSC clinic offers blood pressure screenings to employees during May

The JSC Clinic will be offering blood pressure screening during May and employees may have their pressure screened in several locations.

On Monday, May 19, the clinic staff will conduct screenings from 8:30-11:30 a.m. at Bldg. 30; 1-2:30 p.m. at Bldg. 4 South and from 2:45-3 p.m. at Bldg. 32.

On Tuesday, May 20, the staff will conduct screenings from 8:30-11:30 a.m. at Bldg. 1; 1-2 p.m. at Bldg. 7; and from 2:45-3:45 p.m. at Bldg. 15.

On Wednesday, May 21, the staff will conduct screenings from 8:30-11:30 a.m. at Bldg. 45; from 1-2 p.m. at Bldg. 16 and from 2:45-3:45 p.m. at Bldg. 31.

On Thursday, May 22, screenings will be given from 8:30-9:45 a.m. at Bldg. 44; 10-11:30 a.m. at Bldg. 419; 1-2 p.m. at Bldg. 37 and 2:15-3:45 p.m. at Bldg. 325.

On Friday, May 23, the staff will conduct screenings from 8:30-9:30 a.m. at Bldg. 225; from 10-11 a.m. at Bldg. 372 at Ellington Field; and from 1-2 p.m. at Bldg. 17.

total health

Employees are encouraged to have their blood pressure checked to prevent heart disease. Medical scientists have determined a normal range for blood pressure and people whose pressure is consistently higher than normal have high blood pressure or hypertension. High blood pressure causes the heart to become enlarged, can scar the arteries and can form blood clots. All of these can lead to heart failure. For more information on the screenings call the clinic at x34111.

JSC Safety Alert

Reduce Your Unintentional Exposure To Hazardous Materials

What happened

Seven gallons of three products were purchased and then used in Bldg. 9 South without Material Safety Data Sheets (MSDS) being available for these products. The lack of MSDSs was discovered while processing the material for disposal.

Outcome of the Investigation

A product, without an MSDS, may enter the workplace several ways: through normal logistics channels; by delivery of a material to a JSC bond room; by vendors supplying samples for testing; by individual employees bringing the material to the workplace; and by an off-site contractor bringing materials on-site.

What You Can Do

- Be familiar with both Chapter 601, "Hazardous Materials Safety and Health" and 602, "Hazard Communication" of JPG 1700.1G, JSC Requirements Handbook for Safety, Health, and Environmental Protection;
- Attend the Hazard Communication training for JSC;
- Look for materials without labels or MSDSs during your scheduled safety walk-throughs;
- Follow the instructions on the labels and MSDSs to protect yourself as well as your fellow employees; and
- Report chemicals, materials, or products without labels or MSDSs to your immediate supervisor, safety representative or Facility Manager.

DO NOT work with a chemical, material, or product that does not have a label and an MSDS.

A copy of any MSDS in your work area must be sent to the JSC Central Repository (SD23). Check JSC MSDS numbers. If you don't have one, contact Margaret Mundine at x37512 for assistance.